CLAIMS

1. A plasma display device in which a plurality of discharge cells having at least one color is disposed, phosphor layers having a color corresponding to the respective discharge cells are disposed, and the phosphor layers are excited by ultraviolet light to emit light, wherein at least one phosphor layer among the phosphor layers is made of a phosphor that has a composition formula of $Ba_{(1-x-y)}Sr_yMgAl_{10}O_{17}:Eu_x$ and is treated in an ozone atmosphere.

2. The plasma display device of claim 1, wherein, in the composition formula of $Ba_{(1-x-y)}Sr_yMgAl_{10}O_{17}:Eu_x$, $0.01 \leq x \leq 0.20$ and $0 \leq y \leq 0.30$.

3. A method of fabricating a phosphor in which at least one of Eu and Mn is added as an activator thereof and a multiple oxide containing at least one of elements Ba, Ca, Sr, and Mg is a host crystal thereof, the method comprising:

firing mixed materials of the phosphor in a reducing atmosphere at least once; and

treating the phosphor in an ozone atmosphere after the step of treatment in the reducing atmosphere.

4. The method of fabricating a phosphor of claim 3, wherein, a composition formula of the phosphor is $Ba_{(1-x-y)}Sr_yMgAl_{10}O_{17}:Eu_x$, where $0.01 \leq x \leq 0.20$ and $0 \leq y \leq 0.30$.